



## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

#### 50 CFR Part 217

[Docket No. 231213-0302]

RIN 0648-BK57

### **Taking and Importing Marine Mammals; Taking Marine Mammals Incidental to the U.S. Coast Guard's Alaska Facility Maintenance and Repair Activities**

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Final rule; notification of issuance of Letter of Authorization.

**SUMMARY:** NMFS, upon request from the United States Coast Guard (Coast Guard), hereby issues regulations to govern the unintentional taking of marine mammals incidental to maintenance and repair at facilities in Alaska, over the course of 5 years (2023-2028). These regulations, which allow for the issuance of a Letter of Authorization (LOA) for the incidental take of marine mammals during the described activities and specified timeframes, prescribe the permissible methods of taking and other means of effecting the least practicable adverse impact on marine mammal species or stocks and their habitat, as well as requirements pertaining to the monitoring and reporting of such taking.

**DATES:** Effective from March 1, 2024, through February 28, 2029.

**ADDRESSES:** A copy of the Coast Guard's application and any supporting documents, as well as a list of the references cited in this document, may be obtained online at:

<https://www.fisheries.noaa.gov/action/incidental-take-authorization-us-coast-guards-alaska-facility-maintenance-and-repair>. In case of problems accessing these documents, please call the contact listed below.

**FOR FURTHER INFORMATION CONTACT:** Cara Hotchkin, Office of Protected Resources, NMFS, (301) 427-8401.

**SUPPLEMENTARY INFORMATION:**

**Purpose and Need for Regulatory Action**

We received an application from the Coast Guard requesting 5-year regulations and authorization to take multiple species of marine mammals. This rule establishes a framework under the authority of the MMPA (16 U.S.C. 1361 *et seq.*) to allow for the authorization of take of marine mammals incidental to the Coast Guard's construction activities related to maintenance and repair at facilities in Alaska.

*Legal Authority for the Action*

Section 101(a)(5)(A) of the MMPA (16 U.S.C. 1371(a)(5)(A)) directs the Secretary of Commerce to allow, upon request, the incidental, but not intentional taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region for up to 5 years if, after notice and public comment, the agency makes certain findings and issues regulations that set forth permissible methods of taking pursuant to that activity and other means of effecting the "least practicable adverse impact" on the affected species or stocks and their habitat (see the discussion below in the *Mitigation* section), as well as monitoring and reporting requirements. Section 101(a)(5)(A) of the MMPA and the implementing regulations at 50 CFR part 216, subpart I provide the legal basis for issuing this final rule containing 5-year regulations, and for any subsequent Letters of Authorization (LOAs). As directed by this legal authority, this final rule contains mitigation, monitoring, and reporting requirements.

*Summary of Major Provisions within the Regulations*

Following is a summary of the major provisions of this rule regarding Coast Guard construction activities. These measures include:

- Required monitoring of the construction areas to detect the presence of marine mammals before beginning construction activities;
- Shutdown of construction activities under certain circumstances to avoid injury of marine mammals; and
- Soft start for impact pile driving to allow marine mammals the opportunity to leave the area prior to beginning impact pile driving at full power.

## **Background**

The MMPA prohibits the “take” of marine mammals, with certain exceptions. Sections 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 *et seq.*) direct the Secretary of Commerce (as delegated to NMFS) to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and either regulations are issued or, if the taking is limited to harassment, a notice of a proposed incidental take authorization may be provided to the public for review.

Authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s) and will not have an unmitigable adverse impact on the availability of the species or stock(s) for taking for subsistence uses (where relevant). Further, NMFS must prescribe the permissible methods of taking and other “means of effecting the least practicable adverse impact” on the affected species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of the species or stocks for taking for certain subsistence uses (referred to as “mitigation”); and requirements pertaining to the mitigation, monitoring, and reporting of the takings are set forth. The definitions of all applicable MMPA statutory terms cited above are included in the relevant sections below.

## **Summary of Request**

On March 15, 2021, NMFS received an application from the Coast Guard requesting authorization for take of marine mammals incidental to construction activities related to maintenance and repair at eight Coast Guard facilities in Alaska. On November 24, 2021 (86 FR 67023), we published a notice of receipt of the Coast Guard's application in the **Federal Register**, requesting comments and information related to the request for 30 days. We received no public comments. Following additional review, we determined the application was adequate and complete on January 19, 2022. On August 12, 2022, the Coast Guard submitted a modification to their application (to include vibratory driving of composite piles as part of the specified activity). This revised application was deemed adequate and complete on August 31, 2022. On April 28, 2023, we published the proposed rule in the **Federal Register** (88 FR 26432), incorporating the changes submitted by the Coast Guard in August 2022, and requested comments and information from the public. We received no public comments. The regulations in this final rule are valid for 5 years after the initial effective date, and allow for authorization of take of 12 species of marine mammals by Level A and Level B harassment incidental to construction activities related to facility maintenance and repair at 8 sites in Alaska. Neither the Coast Guard nor NMFS expect serious injury or mortality to result from this activity.

## **Description of the Specified Activity**

The Coast Guard plans to conduct construction necessary for maintenance and repair of existing in-water structures at the following eight Coast Guard station facilities in Alaska: Kodiak, Sitka, Ketchikan, Valdez, Cordova, Juneau, Petersburg, and Seward. These repairs will include installation and removal of steel, concrete, and timber piles, involving use of impact and vibratory hammers and Down-The-Hole drilling (DTH) equipment, and removal of piles by cutting, clipping, or vibratory extraction.

Maintenance activities may also include underwater power washing. Up to 245 piles will be removed and replaced on a 1-to-1 basis (*i.e.*, total pile numbers at these facilities are expected to remain the same) over the 5-year period of effectiveness for the regulations. Hereafter (unless otherwise specified or detailed) we use the term “pile driving” to refer to both pile installation and pile removal. The use of vibratory, DTH, and impact pile driving equipment is expected to produce underwater sound at levels that have the potential to result in harassment of marine mammals.

A more detailed description of the planned construction project is provided in the proposed rule (88 FR 26432, April 28, 2023). Since that time, no changes have been made to the planned activities. Therefore, a detailed description is not provided here. Please refer to the proposed rule (88 FR 26432, April 28, 2023) for the detailed description of the specific planned activities at each facility.

### **Comments and Responses**

The proposed rule to authorize take of marine mammals incidental to construction activities related to maintenance and repair at eight Coast Guard facilities in Alaska (88 FR 26432; April 28, 2023) provided detailed descriptions of Coast Guard’s activities, the marine mammal species that may be affected by the activities, and the anticipated effects on marine mammals, and requested public input on the Coast Guard’s request for authorization, our analyses, the proposed authorization, and any other aspect of the proposed authorization. The proposed rule requested that interested persons submit relevant information, suggestions, and comments in a 30-day public comment period. NMFS received no substantive public comments on the proposed rule.

### **Changes from the Proposed Rule**

Since the proposed rule was published (88 FR 26432, April 28, 2023), NMFS published the final 2022 Alaska and Pacific Stock Assessment Reports (SAR), available at <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal->

*stock-assessment-reports-region*, which describe revised stock structures under the MMPA for humpback whales and southeast Alaska harbor porpoise (Carretta *et al.*, 2023; Young *et al.*, 2023). In the proposed rule, we explained that, although we typically consider updated peer-reviewed data provided in draft SARs to be the best available science, and use the information accordingly, proposed revisions to stock structures are excepted due to potential changes based on public comments, and it is more appropriate to use the status quo stock structures until the new stock structures are finalized. Therefore, upon finalization of these revised stock structures in the final SARs, we have made appropriate updates in this final rule. This includes updates in the description of the potentially affected stocks (see the *Description of Marine Mammals in the Area of the Specified Activity* section, including table 1), the attribution of take numbers to stock (see the *Estimated Take* section), and the analyses to ensure the necessary determinations are made for the new stocks (see the *Negligible Impact Analysis and Determination* and *Small Numbers* sections).

In table 1, we updated the stock information to reflect the finalized humpback whale and harbor porpoise stock structures. For humpback whale, the Central and Western North Pacific Stocks have been replaced by the Hawai'i and Mexico-North Pacific stocks; for harbor porpoise, the Southeast Alaska stock has been split into the Northern Southeast Alaska Inland Waters, Southern Southeast Alaska Inland Waters, and Yakutat/Southeast Alaska Offshore Waters stocks. New stocks have been updated to include associated ESA/MMPA status, stock abundance data, PBR, and Annual Mortality and Serious Injury data. Updates to stock names have also been carried through in tables 9 through 16, as relevant, and stock ranges have been noted in footnotes on table 13.

NMFS has also made a few minor corrections in this final rule. In Table 7 of the *Estimated Take* section of the proposed rule, the correct reference for the sound source level for impact installation of 24-inch concrete piles is "Washington State Department of

Transportation (WSDOT) (2007)”, not “WSDOT (2020)””; the correct reference has been included in Table 4 in this final rule. In the regulatory text of this final rule, text relating to Protected Species Observer (PSO) qualifications (§ 217.195 (b)) has been subdivided into § 217.195(b)(1) to § 217.195(b)(5) for clarity. Additionally, the following text was added to § 217.195(e)(1)(ii)(B) “When possible, the number of strikes for each pile/hole (impact driving, DTH); and, for DTH, the duration of operation for both impulsive and non-impulsive components as well as the strike rate must be included” for consistency with current guidelines on hydroacoustic data collection.

This final rule also corrects addition errors in two tables in the proposed rule: table 15 (Level B Harassment Take in Each of the Five Years and in Total) and table 19 (Proposed Level A and Level B Harassment Take and Percent of Stock for the Highest Annual Estimated Takes of the Project). In table 15, the total estimated take for minke whale should have been 26, rather than 25. In table 19 (which is Table 16 in this final rule), the total number of takes from the “harbor porpoise – Gulf of Alaska” stock should have summed to 200 rather than 245.

This final rule also includes corrections to several typographical errors in the proposed rule at table 16 (Proposed Level B Harassment Take for Each Facility), which is table 13 in this final rule. Footnote indicators from the application were accidentally included in the take numbers for killer whales and Pacific white-sided dolphins at Cordova and Seward, and for Northern fur seals at Seward. Also, in table 16 of the proposed rule, the values for killer whale were incorrectly ordered. While the order of the column headers was “Kodiak; Sitka; Ketchikan; Seward; Valdez; Cordova; Juneau; Petersburg”, the order of the take estimates presented for killer whales was “Kodiak; Sitka; Ketchikan; Valdez; Cordova; Juneau; Petersburg; Seward”, resulting in errors for Seward, Valdez, Cordova, Juneau, and Petersburg. These errors impacted the site-specific take calculations and total estimates of take by Level B harassment for these species. The

correct take estimates have been carried through and are shown in tables 12, 13, and 16 of this final rule. All corrections to proposed rule Table 16 resulted in a lower amount of take by Level B harassment than that shown in the proposed rule. Total take by Level B Harassment over the course of the 5-year authorization changed as follows:

- Killer whales: proposed: 797; final: 543;
- Pacific white-sided dolphin: proposed: 1,379; final: 1,105; and
- Northern fur seal: proposed: 181; final: 71.

### **Description of Marine Mammals in the Area of the Specified Activity**

We have reviewed the Coast Guard's LOA application, including the species descriptions that summarize available information regarding status and trends, distribution and habitat preferences, behavior and life history, and auditory capabilities of the potentially affected species, for accuracy and completeness and refer the reader to Sections 3 and 4 of the application, instead of reprinting all of the information here. Additional information regarding population trends and threats may be found in NMFS' SARs ([www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments](http://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments)) and more general information about these species (*e.g.*, physical and behavioral descriptions) may be found on NMFS' website ([www.fisheries.noaa.gov/find-species](http://www.fisheries.noaa.gov/find-species)).

Table 1 lists all species or stocks for which take is expected and authorized for this action and summarizes information related to the population or stock, including regulatory status under the MMPA and the Endangered Species Act (ESA) and potential biological removal (PBR), where known. PBR, defined by the MMPA as the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population, is considered in concert with known sources of ongoing anthropogenic mortality (as described in NMFS' SARs). While no mortality is anticipated or authorized



here, PBR and annual serious injury and mortality from anthropogenic sources are included here as gross indicators of the status of the species and other threats.

Marine mammal abundance estimates presented in this document represent the total number of individuals that make up a given stock or the total number estimated within a particular study or survey area. NMFS' stock abundance estimates for most species represent the total estimate of individuals within the geographic area, if known, that comprises that stock. For some species, this geographic area may extend beyond U.S. waters. All managed stocks in the specified geographical regions are assessed in either NMFS' U.S. Alaska SARs or U.S. Pacific SARs. All values presented in table 1 are the most recent available at the time of writing, including in the final 2022 SARs, and are available online at: <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessment-reports-species-stock>.

**Table 1 -- Species Likely Impacted by the Specified Activities**

Common name	Scientific name	Stock	ESA/MMPA status; Strategic (Y/N) <sup>1</sup>	Stock abundance (CV, N <sub>min</sub> , most recent abundance survey) <sup>2</sup>	PBR	Annual M/SI <sup>3</sup>
Order Cetartiodactyla – Cetacea – Superfamily Mysticeti (baleen whales)						
Family Eschrichtiidae						
Gray whale	<i>Eschrichtius robustus</i>	Eastern North Pacific	-, -, N	26,960 (0.05, 25,849, 2016)	801	131
Family Balaenopteridae (rorquals)						
Humpback whale	<i>Megaptera novaeangliae</i>	Hawai'i	-, -, N	11,278 (0.56, 7,265, 2020)	127	27.09
		Mexico – North Pacific	T, D, Y	918 (0.217, UNK, 2006)	UND	0.57
Fin whale	<i>Balaenoptera physalus</i>	Northeast Pacific	E, D, Y	UND (UND, UND, 2013)	UND	0.6
Minke whale	<i>Balaenoptera acutorostrata</i>	Alaska	-, -, N	N/A (N/A, N/A, N/A) <sup>4</sup>	UND	0
Superfamily Odontoceti (toothed whales, dolphins, and porpoises)						
Family Delphinidae						
Killer whale	<i>Orcinus orca</i>	Eastern North Pacific Alaska Resident	-, -, N	1,920 (N/A, 1,920, 2009)	19	1.3
		Eastern North Pacific Gulf of Alaska, Aleutian Islands, Bearing Sea Transient	-, -, N	587 (N/A, 587, 2012)	5.9	0.8
		Eastern North Pacific Northern Resident	-, -, N	302 (N/A, 302, 2018)	2.2	0.2
		AT1 Transient	-, D, Y	7 (N/A, 7, 2019)	0.1	0
		West Coast Transient	-, -, N	349 (N/A, 349, 2018)	3.5	0.4
Pacific white-sided dolphin	<i>Lagenorhynchus obliquidens</i>	North Pacific	-, -, N	26,880 (UND, UND, 1990)	UND	0
Family Phocoenidae (porpoises)						
Dall's porpoise <sup>5</sup>	<i>Phocoenoides dalli</i>	Alaska	-, -, N	UND (UND, UND, 2015)	UND	37
Harbor porpoise	<i>Phocoena phocoena</i>	Northern Southeast Alaska Inland Waters	-, -, Y	1,619 (0.26, 1,250, 2019)	13	5.6
		Southern Southeast Alaska Inland Waters	-, -, Y	890 (0.37, 610, 2019)	6.1	7.4
		Yakutat/ Southeast Alaska Offshore Waters	-, -, N	UND (UND, UND, N/A)	UND	22.2
		Gulf of Alaska	-, -, Y	31,046 (0.21, N/A, 1998)	UND	72
Order Carnivora – Superfamily Pinnipedia						
Family Otariidae (eared seals and sea lions)						
California sea lion	<i>Zalophus californianus</i>	U.S.	-, -, N	257,606 (N/A, 233,515, 2014)	14,011	>321
Northern fur seal	<i>Callorhinus ursinus</i>	Eastern Pacific	-, D, Y	626,618 (0.2, 530,376, 2019)	11,403	373
Steller sea lion	<i>Eumetopias jubatus</i>	Eastern	-, -, N	43,201 (N/A, 43,201, 2017)	2,592	112

		Western	E, D, Y	52,932 (N/A, 52,932, 2019)	318	254
Family Phocidae (earless seals)						
Harbor seal	<i>Phoca vitulina</i>	Prince William Sound	-, -, N	44,756 (N/A, 41,776, 2015)	1,253	413
		Lynn Canal/Stephens Passage	-, -, N	13,388 (N/A, 11,867, 2016)	214	50
		Sitka/Chatham Strait	-, -, N	13,289 (N/A, 11,883, 2015)	356	77
		Clarence Strait	-, -, N	27,659 (N/A, 24,854, 2015)	746	40
		South Kodiak	-, -, N	26,448 (N/A, 22,351, 2017)	939	127

1 - ESA status: Endangered (E), Threatened (T)/MMPA status: Depleted (D). A dash (-) indicates that the species is not listed under the ESA or designated as depleted under the MMPA. Under the MMPA, a strategic stock is one for which the level of direct human-caused mortality exceeds PBR or which is determined to be declining and likely to be listed under the ESA within the foreseeable future. Any species or stock listed under the ESA is automatically designated under the MMPA as depleted and as a strategic stock.

2- NMFS marine mammal stock assessment reports online at: <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments/>. CV is coefficient of variation; Nmin is the minimum estimate of stock abundance. In some cases, CV is not applicable (N/A). UND indicates data unavailable.

3 - These values, found in NMFS' SARs, represent annual levels of human-caused mortality plus serious injury (M/SI) from all sources combined (e.g., commercial fisheries, ship strike). Annual M/SI often cannot be determined precisely and is in some cases presented as a minimum value or range. A CV associated with estimated mortality due to commercial fisheries is presented in some cases.

4 - No population estimates have been made for the number of minke whales in the entire North Pacific. Some information is available on the numbers of minke whales in some areas of Alaska, but in the 2009, 2013, and 2015 offshore surveys, so few minke whales were seen during the surveys that a population estimate for the species in this area could not be determined (Rone *et al.*, 2017). Therefore, this information is N/A (not available).

5 - Previous abundance estimates covering the entire stock's range are no longer considered reliable and the current estimates presented in the SARs and reported here only cover a portion of the stock's range. Therefore, the calculated Nmin and PBR is based on the 2015 survey of only a small portion of the stock's range. PBR is considered to be biased low since it is based on the whole stock whereas the estimate of mortality and serious injury is for the entire stock's range.

A detailed description of the species likely to be affected by the Coast Guard's programmatic maintenance project, including brief introductions to the species and relevant stocks, as well as available information regarding population trends and threats, and information regarding local occurrence, were provided in the proposed rule (88 FR 26432, April 28, 2023). With the exception of humpback whale and harbor porpoise, NMFS is not aware of any changes in the status of these species and stocks; therefore, detailed descriptions are not provided here. Please refer to the proposed rule (88 FR 26432, April 28, 2023) for these descriptions. Please also refer to NMFS' website (<https://www.fisheries.noaa.gov/find-species>) for generalized species accounts.

The 2022 Alaska and Pacific SARs described a revised stock structure for humpback whales which modifies the previous stocks designated under the MMPA to align more closely with the ESA-designated DPSs (Caretta *et al.*, 2023; Young *et al.*, 2023). Specifically, the three previous North Pacific humpback whale stocks (Central and Western North Pacific stocks and a CA/OR/WA stock) were replaced by five stocks, largely corresponding with the ESA-designated DPSs. These include Western North Pacific and Hawai'i stocks and a Central America/Southern Mexico-CA/OR/WA stock (which corresponds with the Central America DPS). The remaining two stocks, corresponding with the Mexico DPS, are the Mainland Mexico-CA/OR/WA and Mexico-North Pacific stocks (Caretta *et al.*, 2023; Young *et al.*, 2023). The former stock is expected to occur along the west coast from California to southern British Columbia, while the latter stock may occur across the Pacific, from northern British Columbia through the Gulf of Alaska and Aleutian Islands/Bering Sea region to Russia.

In the proposed rule, NMFS stated that the Central North Pacific stock of humpback whale was likely to be impacted by USCG's activities. Given the final revised stock structure, NMFS has reanalyzed the potential for take of each stock of humpback

whale and determined that the Hawai'i stock and the Mexico-North Pacific stock are likely to be impacted by USCG's activities.

The 2022 Alaska SARs described a revised stock structure for southeast Alaska harbor porpoise, which were split from one stock into three: the Northern Southeast Alaska Inland Waters, Southern Southeast Alaska Inland Waters, and Yakutat/Southeast Alaska Offshore Waters harbor porpoise stocks (Young *et al.*, 2023). This update better aligns harbor porpoise stock structure with genetics, trends in abundance, and information regarding discontinuous distribution trends (Young *et al.*, 2023). Harbor porpoises found near Sitka are assumed to be members of the Yakutat/ Southeast Alaska Offshore Waters stock. Harbor porpoises found near Juneau are assumed to be members of the Northern Southeast Alaska Inland Waters stock, while those found near Ketchikan are assumed to be members of the Southern Southeast Alaska Inland Waters stock, based on the geographical range of the stocks. The dividing line between the Northern and Southern Southeast Alaska Inland Waters Stocks is very close to Petersburg; therefore harbor porpoises at this location are assumed to be from both stocks in equal proportions. Please refer to the proposed rule (88 FR 26432, April 28, 2023) for species descriptions. Please also refer to the NMFS' website (<https://www.fisheries.noaa.gov/find-species>) for generalized species accounts, and to the SARs (<https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments>) for more information about the changes to humpback whale and harbor porpoise stock structures.

#### *Marine Mammal Hearing*

Hearing is the most important sensory modality for marine mammals underwater, and exposure to anthropogenic sound can have deleterious effects. To appropriately assess the potential effects of exposure to sound, it is necessary to understand the frequency ranges marine mammals are able to hear. Current data indicate that not all marine mammal species have equal

hearing capabilities (*e.g.*, Richardson *et al.*, 1995; Wartzok and Ketten, 1999; Au and Hastings, 2008). To reflect this, Southall *et al.* (2007) recommended that marine mammals be divided into functional hearing groups based on directly measured or estimated hearing ranges on the basis of available behavioral response data, audiograms derived using auditory evoked potential techniques, anatomical modeling, and other data. Note that no direct measurements of hearing ability have been successfully completed for mysticetes (*i.e.*, low-frequency cetaceans). Subsequently, NMFS (2016) described generalized hearing ranges for these marine mammal hearing groups. Generalized hearing ranges were chosen based on the approximately 65-decibel (dB) threshold from the normalized composite audiograms, with an exception for lower limits for low-frequency cetaceans where the result was deemed to be biologically implausible and the lower bound from Southall *et al.* (2007) retained. Marine mammal hearing groups and their associated hearing ranges are provided in table 2.

**Table 2 -- Marine Mammal Hearing Groups (NMFS, 2018)**

Hearing Group	Generalized Hearing Range*
Low-frequency (LF) cetaceans (baleen whales)	7 Hz to 35 kHz
Mid-frequency (MF) cetaceans (dolphins, toothed whales, beaked whales, bottlenose whales)	150 Hz to 160 kHz
High-frequency (HF) cetaceans (true porpoises, <i>Kogia</i> , river dolphins, cephalorhynchid, <i>Lagenorhynchus cruciger</i> & <i>L. australis</i> )	275 Hz to 160 kHz
Phocid pinnipeds (PW) (underwater) (true seals)	50 Hz to 86 kHz
Otariid pinnipeds (OW) (underwater) (sea lions and fur seals)	60 Hz to 39 kHz
* Represents the generalized hearing range for the entire group as a composite ( <i>i.e.</i> , all species within the group), where individual species' hearing ranges are typically not as broad. Generalized hearing range chosen based on ~65 dB threshold from normalized composite audiogram, with the exception for lower limits for LF cetaceans (Southall <i>et al.</i> , 2007) and PW pinniped (approximation).	

The pinniped functional hearing group was modified from Southall *et al.* (2007) on the basis of data indicating that phocid species have consistently demonstrated an extended frequency range of hearing compared to otariids, especially in the higher frequency range (Hemilä *et al.*, 2006; Kastelein *et al.*, 2009; Reichmuth and Holt, 2013). This division between phocid and otariid pinnipeds is now reflected in the updated hearing groups proposed in Southall *et al.* (2019).

For more detail concerning these groups and associated generalized hearing ranges, please see the Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing (NMFS, 2018; <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-acoustic-technical-guidance>) for a review of available information.

### **Potential Effects of the Specified Activity on Marine Mammals and Their Habitat**

This section includes a summary and discussion of the ways that components of the specified activity may impact marine mammals and their habitat. The *Estimated Take* section later in this document includes a quantitative analysis of the number of individuals that are expected to be taken by this activity. The *Negligible Impact Analysis*

*and Determination* section considers the content of this section, the *Estimated Take* section, and the *Mitigation* section, to draw conclusions regarding the likely impacts of these activities on the reproductive success or survivorship of individuals and how those impacts on individuals are likely to impact marine mammal species or stocks.

The effects of underwater noise from Coast Guard's construction activities have the potential to result in behavioral harassment of marine mammals in the vicinity of the survey area. The proposed rule (88 FR 26432, April 28, 2023) included a discussion of the effects of anthropogenic noise on marine mammals and the potential effects of underwater noise from pile installation and extraction on marine mammals and their habitat. That information and analysis is not repeated here; please refer to the proposed rule (88 FR 26432, April 28, 2023).

### **Estimated Take**

This section provides an estimate of the number of incidental takes for authorization, which will inform both NMFS' consideration of "small numbers" and the negligible impact determination.

Harassment is the only type of take expected to result from these activities. Except with respect to certain activities not pertinent here, section 3(18) of the MMPA defines "harassment" as: any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild (Level A harassment); or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering (Level B harassment).

Authorized takes would be by Level A or Level B harassment only, in the form of disruption of behavioral patterns for individual marine mammals resulting from exposure to the acoustic sources. Based on the nature of the activity, no serious injury or mortality is anticipated or authorized for this activity. Below we describe how the take is estimated.



Generally speaking, we estimate take by considering: (1) acoustic thresholds above which NMFS believes the best available science indicates marine mammals will be behaviorally harassed or incur some degree of permanent hearing impairment; (2) the area or volume of water that will be ensonified above these levels in a day; (3) the density or occurrence of marine mammals within these ensonified areas; and, (4) and the number of days of activities. We note that while these basic factors can contribute to a basic calculation to provide an initial prediction of takes, additional information that can qualitatively inform take estimates is also sometimes available (*e.g.*, previous monitoring results or average group size). Below, we describe the factors considered here in more detail and present the take estimate.

#### *Acoustic Thresholds*

NMFS recommends the use of acoustic thresholds that identify the received level of underwater sound above which exposed marine mammals would be reasonably expected to be behaviorally harassed (equated to Level B harassment) or to incur permanent threshold shift (PTS) of some degree (equated to Level A harassment).

*Level B Harassment* – Though significantly driven by received level, the onset of behavioral disturbance from anthropogenic noise exposure is also informed to varying degrees by other factors related to the source (*e.g.*, frequency, predictability, duty cycle), the environment (*e.g.*, bathymetry), and the receiving animals (hearing, motivation, experience, demography, behavioral context) and can be difficult to predict (Southall *et al.*, 2007, Ellison *et al.*, 2012). Based on what the available science indicates and the practical need to use a threshold based on a factor that is both predictable and measurable for most activities, NMFS uses a generalized acoustic threshold based on received level to estimate the onset of behavioral harassment. NMFS predicts that marine mammals are likely to be behaviorally harassed in a manner we consider Level B harassment when exposed to underwater anthropogenic noise above received levels of 120 dB referenced to

1 micropascal (re 1  $\mu$ Pa) root mean square (rms) for continuous (*e.g.*, vibratory pile-driving, DTH) and above 160 dB re 1  $\mu$ Pa (rms) for non-explosive impulsive, intermittent (*e.g.*, impact driving, DTH) sources.

The Coast Guard's planned activity includes the use of continuous (vibratory, DTH) and impulsive (impact pile driving and DTH) sources, and therefore the 120 and 160 dB re 1  $\mu$ Pa (rms) thresholds, respectively, are applicable.

*Level A harassment for non-explosive sources* - NMFS' Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing (Version 2.0) (Technical Guidance, 2018) identifies dual criteria to assess auditory injury (Level A harassment) to five different marine mammal groups (based on hearing sensitivity) as a result of exposure to noise from two different types of sources (impulsive or non-impulsive). The Coast Guard's planned activity includes the use of impulsive (impact pile driving and DTH) and non-impulsive (vibratory, DTH) sources.

These thresholds are provided in the table below. The references, analysis, and methodology used in the development of the thresholds are described in NMFS 2018 Technical Guidance, which may be accessed at <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-acoustic-technical-guidance>.

**Table 3 -- Thresholds Identifying the Onset of Permanent Threshold Shift**

Hearing Group	PTS Onset Acoustic Thresholds* (Received Level)	
	Impulsive	Non-impulsive
Low-Frequency (LF) Cetaceans	<i>Cell 1</i> $L_{pk,flat}$ : 219 dB $L_{E,LF,24h}$ : 183 dB	<i>Cell 2</i> $L_{E,LF,24h}$ : 199 dB
	<i>Cell 3</i> $L_{pk,flat}$ : 230 dB $L_{E,MF,24h}$ : 185 dB	<i>Cell 4</i> $L_{E,MF,24h}$ : 198 dB
High-Frequency (HF) Cetaceans	<i>Cell 5</i> $L_{pk,flat}$ : 202 dB $L_{E,HF,24h}$ : 155 dB	<i>Cell 6</i> $L_{E,HF,24h}$ : 173 dB

Phocid Pinnipeds (PW) (Underwater)	<i>Cell 7</i> $L_{pk,flat}$ : 218 dB $L_{E,PW,24h}$ : 185 dB	<i>Cell 8</i> $L_{E,PW,24h}$ : 201 dB
Otariid Pinnipeds (OW) (Underwater)	<i>Cell 9</i> $L_{pk,flat}$ : 232 dB $L_{E,OW,24h}$ : 203 dB	<i>Cell 10</i> $L_{E,OW,24h}$ : 219 dB
<p>* Dual metric acoustic thresholds for impulsive sounds: Use whichever results in the largest isopleth for calculating PTS onset. If a non-impulsive sound has the potential of exceeding the peak sound pressure level thresholds associated with impulsive sounds, these thresholds should also be considered.</p> <p><u>Note:</u> Peak sound pressure (<math>L_{pk}</math>) has a reference value of 1 <math>\mu</math>Pa, and cumulative sound exposure level (<math>L_E</math>) has a reference value of 1 <math>\mu</math>Pa<sup>2</sup>s. In this table, thresholds are abbreviated to reflect American National Standards Institute standards (ANSI 2013). However, peak sound pressure is defined by ANSI as incorporating frequency weighting, which is not the intent for the Technical Guidance. Hence, the subscript “flat” is being included to indicate peak sound pressure should be flat weighted or unweighted within the generalized hearing range. The subscript associated with cumulative sound exposure level thresholds indicates the designated marine mammal auditory weighting function (LF, MF, and HF cetaceans, and PW and OW pinnipeds) and that the recommended accumulation period is 24 hours. The cumulative sound exposure level thresholds could be exceeded in a multitude of ways (<i>i.e.</i>, varying exposure levels and durations, duty cycle). When possible, it is valuable for action proponents to indicate the conditions under which these acoustic thresholds will be exceeded.</p>		

### *Ensonified Area*

Here, we describe operational and environmental parameters of the activity that will feed into estimating the area ensonified above the acoustic thresholds, which include source levels and transmission loss coefficient.

The sound field in the project area is the existing background noise plus additional construction noise from the project. Marine mammals are expected to be affected via sound generated by the primary components of the project (*i.e.*, impact pile driving, vibratory pile driving, vibratory pile removal, and DTH).

The actual durations of each installation method vary depending on the type and size of the pile. In order to calculate distances to the Level A harassment and Level B harassment sound thresholds for piles of various sizes and equipment being used in this project, NMFS used acoustic monitoring data from other locations to develop source levels (table 4). Note that piles and holes of differing sizes have different sound source levels (SSL). For simplicity and to be precautionary we analyze the largest pile diameter

of each type (e.g., 24-inch (0.61 m) diameter) even though it is possible at some locations in some situations smaller pile diameters may be used or be removed.

**Table 4 -- Sound Source Levels**

Method and Pile Type	Sound Source Level at 10 meters (dB)	Literature Source
Timber Vibratory	152 RMS	Greenbusch Group 2018
24-inch Steel Pipe Vibratory	162 RMS	Laughlin 2010
Timber Impact	170 RMS, 160 SEL, 180 Pk	CALTRANS 2015
Composite impact	153 RMS, 145 SEL	CALTRANS 2020
24-inch Steel Pipe Impact	190 RMS, 177 SEL, 203 Pk	CALTRANS 2015
24-inch Concrete Impact	170 RMS, 159 SEL, 184 Pk	WSDOT 2007
DTH Non-impulsive component	167 RMS	Heyvaert & Reyff 2021
24-inch DTH Impulsive component	159 SEL, 184 dB Pk	Heyvaert & Reyff 2021

Note: It is assumed that noise levels during pile installation and removal are similar. SEL = single strike sound exposure level; Pk = peak sound level; RMS = root mean square.

### *Level B Harassment Zones*

Transmission loss (*TL*) is the decrease in acoustic intensity as an acoustic pressure wave propagates out from a source. *TL* parameters vary with frequency, temperature, sea conditions, current, source and receiver depth, water depth, water chemistry, and bottom composition and topography. The general formula for underwater *TL* is:

$$TL = B \times \text{Log}_{10} (R_1/R_2), \text{ where}$$

*TL* = transmission loss in dB

*B* = transmission loss coefficient; for practical spreading equals 15

*R<sub>1</sub>* = the distance of the modeled SPL from the driven pile, and

*R<sub>2</sub>* = the distance from the driven pile of the initial measurement

The recommended *TL* coefficient for most nearshore environments is the practical spreading value of 15. This value results in an expected propagation environment that would lie between spherical and cylindrical spreading loss conditions, which is the most appropriate assumption for the Coast Guard's planned activity.

Using the practical spreading model, the Coast Guard determined underwater noise would fall below the behavioral effects thresholds of 120 dB rms or 160 dB rms for

marine mammals at a maximum radial distances from 46 m for impact driving of timber or concrete piles to 13,594 m for DTH (table 5). These distances determine the maximum Level B harassment zones for the project. It should be noted that, based on the geography of many of the sites, sound will not reach the full distance of the Level B harassment isopleth. Generally, due to interaction with land, only a portion of the possible area is ensonified.

**Table 5 -- Calculated Distances to Level B Harassment Isopleths**

Method and Pile Type	Level B Isopleth (m)
Timber Vibratory	1,359
24-inch Steel Pipe Vibratory	6,310
Timber Impact	46
Composite Impact	3
24-inch Steel Pipe Impact	1000
24-inch Concrete Impact	46
DTH	13,594

#### *Level A Harassment Zones*

When the NMFS Technical Guidance (2016) was published, in recognition of the fact that ensonified area/volume could be more technically challenging to predict because of the duration component in the new thresholds, we developed a User Spreadsheet that includes tools to help predict a simple isopleth that can be used in conjunction with marine mammal density or occurrence to help predict takes. We note that, because of some of the assumptions included in the methods used for these tools, we anticipate that isopleths produced are typically going to be overestimates of some degree, which may result in some degree of overestimate of take by Level A harassment. However, these tools offer the best way to predict appropriate isopleths when more sophisticated three dimensional modeling methods are not available, and NMFS continues to develop ways to quantitatively refine these tools, and will qualitatively address the output where appropriate. For stationary sources such as pile driving or DTH, NMFS User Spreadsheet

predicts the closest distance at which, if a marine mammal remained at that distance the whole duration of the activity, it would not incur PTS.

Inputs used in the User Spreadsheet (table 6), and the resulting isopleths are reported below (table 7). We analyzed scenarios with up to five piles per day to account for maximum possible production rates. Level A harassment thresholds for impulsive sound sources (impact pile driving and DTH) are defined for both the cumulative sound exposure level ( $SEL_{cum}$ ) and Peak sound pressure level (SPL), with the threshold that results in the largest modeled isopleth for each marine mammal hearing group used to establish the Level A harassment isopleth. In this analysis, Level A harassment isopleths based on  $SEL_{cum}$  were always larger than those based on Peak SPL.

**Table 6 -- Inputs of Pile Driving and DTH Activity Used in User Spreadsheet**

Method and Pile Type	Weighting Factor Adjustment	Duration (minutes) or Strikes per Pile	Piles per Day
Timber Vibratory	2.5	50	5
24-inch Steel Pipe Vibratory	2.5	10	5
Timber Impact	2	100	5
Composite Impact	2	120	5
24-inch Steel Pipe Impact	2	400	1
24-inch Concrete Impact	2	184	5
24-inch DTH	2	60	2

Note: Data for all equipment types were for transmission loss of  $15 \cdot \log(r)$  and distance of source level measurements was 10 meters.

The above input scenarios lead to a Level A harassment isopleth of 0 to 517.1 m, depending on the marine mammal hearing group and scenario (table 7).

**Table 7 -- Calculated Distances to Level A Harassment Isopleths (m) During Pile Installation and Removal for Each Hearing Group**

Method and Pile Type	Low Frequency	Mid Frequency	High Frequency	Phocid	Otariid
Timber Vibratory	1.5	0.1	2.2	0.9	0.1
24-inch Steel Pipe Vibratory	7.1	0.6	10.4	4.3	0.3
Timber Impact	18.4	0.7	21.9	9.9	0.7
Composite Impact	2.1	0.1	2.5	1.1	0.1
24-inch Steel Pipe Impact	215.8	7.7	257.1	115.5	8.4

24-inch Concrete Impact	27.7	1	33.0	14.8	1.1
24-inch DTH	434.1	15.4	517.1	232.2	16.9

Note: a minimum 20-m shutdown zone, as proposed by the Coast Guard, will be implemented for all species and activity types to prevent direct injury of marine mammals.

### *Marine Mammal Occurrence and Take Calculation and Estimation*

In this section we provide the information about the presence, density, or group dynamics of marine mammals that will inform the take calculations. Here we describe how the information provided above is brought together to produce a quantitative take estimate.

Available information regarding marine mammal occurrence and abundance in the vicinity of the eight facilities includes monitoring data from the NMFS Alaska Regional Office, prior incidental take authorizations, and ESA consultations on additional projects (table 8). When local density information is not available, data aggregated in the Navy's Marine Mammal Species Density Database (U.S. Navy, 2019, 2020) for the Gulf of Alaska or Northwest Testing and Training areas (table 9) or nearby proxies from the monitoring data are used; whichever gives the most precautionary take estimate was chosen.

**Table 8 -- Marine Mammal Occurrence Data (per day) from Prior Projects**

Stock	Project Location					
	Ketchikan	Sitka	Seward	Juneau	Valdez	Kodiak
Gray whale	0.067	0.1	NA	NA	NA	NA
Humpback whale	0.571	5	1	4	NA	NA
Minke whale	0.024	1	NA	NA	0.25	NA
Killer whale	0.4	8	NA	NA	NA	NA
Pacific white-sided dolphin	2.86	NA	NA	NA	NA	NA
Dall's porpoise	2	NA	0.25	NA	NA	NA

Harbor porpoise	0.5	5	NA	NA	NA	NA
California sea lion	NA	1	NA	NA	NA	NA
Steller sea lion Eastern	10	15.6	NA	NA	NA	NA
Steller sea lion Western	NA	0.4	2	NA	4.2	0.083
Harbor seal Prince William Sound	NA	NA	NA	NA	48.95	NA
Harbor seal Lynn Canal/Stephens Passage	NA	NA	NA	43	NA	NA
Harbor seal Sitka/Chatham Strait	NA	23	NA	NA	NA	NA
Harbor seal Clarence Strait	12	NA	NA	NA	NA	NA

Note: NA indicates that occurrence data was not used for that species and site combination. Density data for species/site combinations listed as NA in this table are shown in table 12.

**Table 9 -- Marine Mammal Densities from Navy Data**

Stock	Southeast Alaska Facilities Species Density (#/km <sup>2</sup> ) <sup>1, 2, 3</sup>	Gulf of Alaska/ Prince William Sound Facilities Species Density (#/km <sup>2</sup> ) <sup>3, 4, 5</sup>
Gray whale	0.016	0.048
Humpback whale Hawai'i <sup>6</sup>	0.002	0.093
Humpback Whale Mexico - North Pacific <sup>6,7</sup>	N/A	0.093
Fin whale	0.0001	0.068
Minke whale	0.001	0.006
Killer whale (General)	N/A	0.005
Killer whale Resident	0.035	N/A
Killer whale Transient	0.006	N/A
Pacific white-sided dolphin	0.085	0.020
Dall's porpoise	0.121	0.218
Harbor porpoise <sup>6</sup>	0.010	0.455
California sea lion <sup>8</sup>	0.025	0
Northern fur seal	0.276	0.090
Steller sea lion	0.316	0.068
Harbor seal	1.727	0.169

<sup>1</sup> Facilities including Ketchikan, Sitka, Juneau, and Petersburg.

<sup>2</sup> Southeast Alaska density values generally from Western Behm Canal values reported in U.S. Navy (2020).

<sup>3</sup> Where species density values reported in the U.S. Navy (2020) and U.S. Navy (2021) vary by time of year, the greatest value is presented here as a conservative estimate.

<sup>4</sup> Facilities including Kodiak, Seward, Valdez, and Cordova.

<sup>5</sup> Gulf of Alaska/Prince William Sound species density values generally from inshore or within the 500-1000 m isobath values reported in U.S. Navy (2021).

<sup>6</sup> New stock designations for humpback whales and harbor porpoise were finalized in July 2023 (2022 SARs). The density values listed correspond to the stock alignments in the 2021 and previous SARs.



<sup>7</sup> The range for the Western North Pacific stock of humpback whales from the 2021 and previous SARs did not extend to Southeast Alaska.

<sup>8</sup> U.S. Navy 2020 density values for California sea lion do not include Western Behm Canal and the value used here is from the San Juan Islands, the next closest zone to the project area where a density value is available.

The data on abundance and occurrence from prior projects is derived from the following projects: (1) Kodiak – Protected Species Observer (PSO) monitoring reports from dock repair projects in 2018 and 2020 (NMFS Alaska Region); (2) Sitka – Data are from the Old Sitka Dock project (86 FR 22392, April 28, 2021); (3) Ketchikan – Data are from the Tongass Narrows project (85 FR 673, January 7, 2020) and other projects in preparation in the area; (4) Valdez – Data are from monitoring for an oil spill response in late April and early May 2020 (NMFS Alaska Region); (5) Juneau – Data are from the Erickson Dock project (84 FR 65360, November 27, 2019) and the Juneau Waterfront Improvement Project (85 FR 18562, April 2, 2020); and, (6) Seward – An incidental harassment authorization application for the Seward Passenger Terminal project recently received by NMFS included information resulting from consultation with the Alaska SeaLife Center, the Kenai Fjords National Park Service, local whale watching companies, and scientific literature to estimate the occurrence of marine mammals in Seward.

To quantitatively assess exposure of marine mammals to noise from pile driving and drilling activities when density estimates are most appropriate, we used the density estimate and the annual anticipated number of work days for each activity at each facility to determine the number of animals potentially harassed on any one day of activity. The calculation is:

$$\text{Exposure estimate} = \text{density} \times \text{harassment area} \times \text{maximum days of activity}$$

For example, exposure estimates at the Ketchikan site for gray whales were calculated by first finding the product of the SE Alaska species density (0.0155 animals/km<sup>2</sup>), the ensonified area for the activity (*e.g.*, 1.45 km<sup>2</sup> for vibratory pile driving of timber piles), for the anticipated number of days for that activity each year (10

days/year). After finding the product for each activity for each year, the values were summed to find the total number of takes for that species across all 5 years. This method was used for all species for which local occurrence data were not available.

When occurrence data from prior projects are the most appropriate data for exposure estimation, we used the occurrence estimate (number/unit of time) and the maximum work days (converted to the appropriate unit of time as needed) per year at each facility to determine the number of animals potentially exposed to an activity. The calculation is:

$$\text{Exposure estimate} = \text{occurrence/time} \times \text{time of activity}$$

and these values are then summed across activity/pile types.

When exposure estimates from density data are used for sites with no local occurrence data and the exposure estimate is less than a typical group size, we increase the estimated take based on that group size to account for the possibility a single group entering the project area would exceed authorized take. Table 10 shows the source of data used in exposure estimates.

The size of the Level B harassment zones for each facility and activity are in table 11. Level A harassment take is only authorized for the activities creating the largest Level A harassment zones: DTH and impact driving of steel pipe piles (see Figures 6-2 through Figure 6-9 in the Coast Guard's application), and for species that would be difficult for observers to detect within large, unconfined zones: high frequency cetaceans and phocid pinnipeds. The topography of sites and facilities in Seward, Juneau, Sitka, and Petersburg are restricted such that noise would be confined to a small area or basin, and PSOs would be able to observe any marine mammals approaching the activity are and Level A shutdown zone with enough warning that work could be stopped before a take by Level A harassment would occur. The facilities at the remaining four sites (Kodiak, Ketchikan, Valdez, and Cordova) are less confined, and PSOs may be unable to observe cryptic

species at the calculated isopleths. Therefore, we have conservatively authorized small numbers of take by Level A harassment for high frequency cetaceans and phocid pinnipeds at these sites.

**Table 10 -- Source of Data Used to Estimate Exposure for Each Species or Stock and Facility**

Species/Stock	Kodiak	Sitka	Ketchikan	Seward	Valdez	Cordova	Juneau	Petersburg
Gray whale	N	Sit	Ke	*	*	*	*	*
Humpback whale	N	Sit	Ke	Sew	V	N	J	N
Fin whale	*	*	*	*	N	N	*	*
Minke whale	N	Sit	Ke	N	V	N	Ke	Ke
Killer whale	N	Sit	Ke	G	N	G	Ke	Ke
Pacific white-sided dolphin	N	Ke	Ke	G	G	G	Ke	Ke
Dall's porpoise	N	N	Ke	Sew	N	N	Ke	Ke
Harbor porpoise Northern Southeast Alaska Inland Waters	*	*	*	*	*	*	Ke	Ke
Harbor porpoise Southern Southeast Alaska Inland Waters	*	*	Ke	*	*	*	*	Ke
Harbor porpoise Yakutat/Southeast Alaska Offshore Waters	*	Sit	*	*	*	*	*	*
Harbor porpoise Gulf of Alaska	N	*	*	N	N	N	*	*
California sea lion	*	Sit	*	*	*	*	N	*
Northern fur seal	N	N	*	G	N	N	*	*
Steller sea lion	Ko	Sit	Ke	Sew	V	N	N	Sit
Harbor seal Prince William Sound	*	*	*	V	V	V	*	*
Harbor seal Lynn Canal/Stephens Passage	*	*	*	*	*	*	J	*
Harbor seal Sitka/Chatham Strait	*	Sit	*	*	*	*	*	*
Harbor seal Clarence Strait	*	*	Ke	*	*	*	*	J
Harbor seal South Kodiak	N	*	*	*	*	*	*	*

Abbreviations for source data are: N – Navy density data, Ke – Ketchikan, Sit – Sitka, Sew – Seward, J – Juneau, V – Valdez, Ko – Kodiak, G – estimate rounded up to 1 group, \* – Not Applicable (no take).

**Table 11 -- Level B Harassment Areas at Each Facility (km<sup>2</sup>) for Each Method and/or Pile Type**

Facility	Timber Vibratory	Steel Vibratory	Timber Impact	Composite <sup>1</sup> Impact	Steel Impact	DTH
Kodiak	1.3	4.51	0.006	0	1.03	4.51
Sitka	0.87	5.67	0.007	0	0.56	
Ketchikan	1.45	7.29	0.004	0	1.06	10.1
Valdez	2.62	40.21	0.007	0	1.43	
Cordova		23.42			1.57	
Juneau	1.62	NA	0.003	0	NA	
Petersburg	1.63	2.89	0.006	0	1.33	
Seward		0.24			0.24	

<sup>1</sup> Composite Level B harassment zone (3 m) is completely encompassed by the 20 m shutdown zone proposed by Coast Guard.

The calculated Level B harassment takes using the above data for each year are in table 12 and for each facility over the course of the project are in table 13. See tables 6-14 through 6-21 in the application and the supplemental memo (composite piles) for detailed calculations of estimated take for each pile type and activity at each facility. The calculated Level A harassment takes using the above data for each year are in table 14 and for each facility over the course of the five years of the rule are in table 15.

Table 16 summarizes Level A and Level B harassment take authorized for the project as well as the percentage of each stock expected to be taken in the year with the maximum annual takes over the course of the project.

**Table 12 -- Level B Harassment Take in Each of the Five Years and in Total**

Stock	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Gray whale	8	8	8	8	8	40
Humpback whale*	160	174	164	160	160	818
Fin whale	13	23	13	13	13	75
Minke whale	5	6	5	5	5	26 <sup>a</sup>
Killer whale*	103	127 <sup>b,d</sup>	107 <sup>b,c</sup>	103	103	543 <sup>b,c,d</sup>
Pacific white-sided dolphin	215	233 <sup>b</sup>	227 <sup>c</sup>	215	215	1,105 <sup>c,d</sup>
Dall's porpoise	114	147	115	114	114	604

Harbor porpoise Northern Southeast Alaska Inland Waters	11	11	11	11	11	55
Harbor Porpoise Southern Southeast Alaska Inland Waters	11	11	11	11	11	55
Harbor porpoise Yakutat/ Southeast Alaska Offshore Waters	50	50	50	50	50	250
Harbor porpoise Gulf of Alaska	47	115	48	47	47	304
California sea lion	10	10	10	10	10	50
Northern fur seal	9	23	21 <sup>d</sup>	9	9	71 <sup>d</sup>
Steller sea lion Eastern	425	425	425	425	425	2,125
Steller sea lion Western	24	34	32	24	24	138
Harbor seal Prince William Sound	148	442	344	148	148	1,230
Harbor seal Lynn Canal/Stephens Passage	860	860	860	860	860	4,300
Harbor seal Sitka/Chatham Strait	230	230	230	230	230	1,150
Harbor seal Clarence Strait	412	412	412	412	412	2,060
Harbor seal South Kodiak	17	17	17	17	17	85

\* Stocks of killer whales and humpback whales cannot generally be identified in the field so total take is listed at species level only.

- Corrected addition error from the proposed rule.
- Total number has changed from the proposed rule due to corrections of typographical errors in the proposed rule.
- Typographical error in take levels at Cordova corrected from proposed rule
- Typographical error in take levels at Seward corrected from proposed rule

**Table 13 – Total (5-year) Estimated Level B Harassment Take for Each Facility**

Species	Stock	Kodiak	Sitka	Ketchikan	Seward	Valdez	Cordova	Juneau	Petersburg
Gray whale	Eastern North Pacific	25	5	10	0	0	0	0	0
Humpback whale	Hawai'i <sup>b</sup>	50	250	60	4	40	14	400	0
	Mexico -North Pacific <sup>c</sup>								
Fin whale	Northeast Pacific	35	0	0	0	30	10	0	0
Minke whale	Alaska	5	0	5	0	5	1	5	5

Killer whale	Alaska Resident <sup>b</sup>	5	400	40	4 <sup>h,i</sup>	20 <sup>i</sup>	24 <sup>h,i</sup>	40 <sup>i</sup>	10 <sup>i</sup>
	Gulf of Alaska, Aleutian Islands, Bearing Sea Transient <sup>d</sup>								
	Northern Resident <sup>e</sup>								
	West Coast Transient <sup>f</sup>								
	AT1 Transient <sup>g</sup>								
Pacific white-sided dolphin	North Pacific	300	145	285	12 <sup>h</sup>	0	18 <sup>h</sup>	285	60
Dall's porpoise	Alaska	15	20	200	1	95	33	200	40
Harbor porpoise	Northern Southeast Alaska Inland Waters <sup>j</sup>	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	50	10
	Southern Southeast Alaska Inland Waters <sup>k</sup>	0 <sup>a</sup>	0 <sup>a</sup>	50	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	
	Yakutat/ Southeast Alaska Offshore Waters <sup>l</sup>	0	250	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>
	Gulf of Alaska <sup>m</sup>	235	0 <sup>a</sup>	0 <sup>a</sup>	1	0	68	0 <sup>a</sup>	0 <sup>a</sup>
California sea lion	United States	0 <sup>a</sup>	50	0	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	0	0 <sup>a</sup>
Northern fur seal	Eastern Pacific	0	0	0	12 <sup>h</sup>	40	14	5	0 <sup>a</sup>
Steller sea lion	Eastern	0 <sup>a</sup>	780	1,000	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	25	320
	Western	35	20	0 <sup>a</sup>	8	65	10	0 <sup>a</sup>	0 <sup>a</sup>
Harbor seal	Prince William Sound	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	196	735	294	5	0 <sup>a</sup>
	Lynn Canal/Stephens Passage	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	4,300	0 <sup>a</sup>
	Sitka/Chatham Strait	0 <sup>a</sup>	1,150	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>
	Clarence Strait	0 <sup>a</sup>	0 <sup>a</sup>	1,200	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	860
	South Kodiak	85	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>

- Stock does not occur in this region, therefore no takes would be authorized (Muto *et al.*, 2022)
- Stock range overlaps with all 8 locations (Muto *et al.*, 2022, Young *et al.*, 2023)
- Stock range overlaps with Kodiak, Seward, Valdez, and Cordova (Muto *et al.*, 2021, Young *et al.*, 2023)
- Stock range overlaps with Kodiak, Sitka, Seward, Valdez, Cordova (Muto *et al.*, 2022)
- Stock range overlaps with Sitka, Ketchikan, Juneau, and Petersburg (Muto *et al.*, 2022)

- f. Stock range overlaps with Seward, Valdez, and Cordova (Muto *et al.*, 2022)
- g. No takes of the AT1 stock are expected or proposed for authorization.
- h. Typographical error from the proposed rule corrected.
- i. Corrected column order of values for killer whale from Seward to Petersburg from the proposed rule.
- j. Newly delineated stock range overlaps with Juneau and Petersburg (Young *et al.*, 2023); stock overlaps with Southern Southeast Alaska Inland Waters stock at Petersburg; takes at this location are assumed to be 50% from each stock.
- k. Newly delineated stock range overlaps with Ketchikan and Petersburg (Young *et al.*, 2023); stock overlaps with Northern Southeast Alaska Inland Waters stock at Petersburg; takes at this location are assumed to be 50% from each stock.
- l. Newly delineated stock range overlaps with Sitka (Young *et al.*, 2023).
- m. Stock range overlaps with Kodiak, Seward, and Cordova (Young *et al.*, 2023).

**Table 14 -- Estimated Level A Harassment Take in Each Year and in Total**

Species and Stock	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Dall's porpoise Alaska	86	98	86	86	86	442
Harbor porpoise Southern Southeast Alaska Inland Waters	20	20	20	20	20	100
Harbor porpoise Gulf of Alaska	55	85	55	55	55	305
Harbor seal South Kodiak	20	20	20	20	20	100
Harbor seal Clarence Strait	20	20	20	20	20	100

**Table 15 – Total (5-year) Estimated Level A Harassment Take for Each Facility**

Species and Stock	Kodiak	Ketchikan	Cordova	Valdez
Dall's porpoise Alaska	200	200	12	30
Harbor porpoise Southern Southeast Alaska Inland Waters	0	100	0	0
Harbor porpoise Gulf of Alaska	200	0	30	75
Harbor seal South Kodiak	100	0	0	0
Harbor seal Clarence Strait	0	100	0	0

**Table 16 -- Estimated Level A and Level B Harassment Take and Percent of Stock for the Maximum Annual Estimated Takes of the Project**

Species and Stock	Level A	Level B	Total	Percent of Stock
Gray whale Eastern North Pacific	0	8	8	0.03
Humpback whale Hawai'i	0	174	174	1.48 <sup>a</sup>
Humpback whale Mexico-North Pacific	0			0.76 <sup>a</sup>
Fin whale Northeast Pacific	0	23	23	N/A
Minke whale Alaska	0	6	6	N/A
Killer whale Alaska Resident	0	127 <sup>c</sup>	127	4.55 <sup>a</sup>
				3.85 <sup>a</sup>

Killer whale Gulf of Alaska, Aleutian Islands, Bearing Sea Transient				3.23 <sup>a</sup>
Killer whale Northern Resident				0 <sup>a,b</sup>
Killer whale AT1 Transient <sup>b</sup>				3.23 <sup>a</sup>
Killer whale West Coast Transient				
Pacific white-sided dolphin North Pacific	0	233 <sup>c</sup>	233	0.87
Dall's porpoise Alaska	98	147	245	N/A
Harbor porpoise Northern Southeast Alaska Inland Waters	0	11	11	0.68
Harbor porpoise Southern Southeast Alaska Inland Waters	20	11	31	3.48
Harbor porpoise Yakutat/Southeast Alaska Offshore Waters	0	50	50	N/A
Harbor porpoise Gulf of Alaska	85	115	200 <sup>c</sup>	0.64
California sea lion U.S.	0	10	10	0.00
Northern fur seal Eastern Pacific	0	23 <sup>c</sup>	23	0.00
Steller sea lion Eastern	0	425	425	0.98
Steller sea lion Western	0	34	34	0.06
Harbor seal Prince William Sound	0	442	442	1.06
Harbor seal Lynn Canal/Stephens Passage	0	860	860	7.25
Harbor seal Sitka/Chatham Strait	0	230	230	1.94
Harbor seal Clarence Strait	20	412	432	1.74
Harbor seal South Kodiak	20	17	37	0.17

<sup>a</sup> Percent of stock impacted for humpback and killer whales was estimated assuming each stock is taken in proportion to its population size at any given facility site from the total take (*e.g.*, for killer whales at Kodiak, the Alaska Resident and Gulf of Alaska stocks are the only stocks present. Of these, the Alaska Resident stock represents approximately 80 percent of the available animals, and GOA represents approximately 20 percent, giving 4 total Alaska Resident killer whale takes over the 5 years, and 1 GOA killer whale take. This division was replicated for each site for all present stocks. Takes were then calculated for each site based on the proportional representation of available stocks. Total takes for each stock are shown as a percentage of the stock size.)

<sup>b</sup> AT1 Transient killer whales have the potential to be present in the Seward, Valdez, and Cordova, however we do not expect any of the seven individuals to approach the project sites, therefore no take is expected to occur for this stock and none is authorized.

<sup>c</sup> Corrected typographical error from the proposed rule

## Mitigation

Under Section 101(a)(5)(A) of the MMPA, NMFS must set forth the permissible methods of taking pursuant to such activity, and other means of effecting the least practicable adverse impact on such species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of such species or stock for taking for certain subsistence uses (“least practicable adverse impact”). NMFS does not have a regulatory definition for “least practicable adverse impact.” NMFS regulations require applicants for incidental take authorizations to include information about the availability and feasibility (economic and



technological) of equipment, methods, and manner of conducting the activity or other means of effecting the least practicable adverse impact upon the affected species or stocks and their habitat (50 CFR 216.104(a)(11)).

In evaluating how mitigation may or may not be appropriate to ensure the least practicable adverse impact on species or stocks and their habitat, as well as subsistence uses where applicable, we carefully consider two primary factors:

(1) The manner in which, and the degree to which, the successful implementation of the measure(s) is expected to reduce impacts to marine mammals, marine mammal species or stocks, and their habitat, as well as subsistence uses. This considers the nature of the potential adverse impact being mitigated (likelihood, scope, range). It further considers the likelihood that the measure will be effective if implemented (probability of accomplishing the mitigating result if implemented as planned), and the likelihood of effective implementation (probability implemented as planned); and

(2) The practicability of the measures for applicant implementation, which may consider such things as cost and impact on operations.

The mitigation strategies described below largely follow those required and successfully implemented under previous incidental take authorizations issued in association with similar construction activities. Measurements from similar pile driving events were coupled with practical spreading loss and other relevant information to estimate harassment zones (see *Estimated Take*); these zones were used to develop mitigation measures for DTH and pile driving activities at the eight facilities.

Background discussion related to underwater sound concepts and terminology is provided in the section on *Description of Sound Sources*, in the proposed rule (88 FR 26432, April 28, 2023).

The following mitigation measures will be implemented:

- Avoid direct physical interaction with marine mammals during construction activity. If a marine mammal comes within 20 m of such activity, operations must cease and vessels must reduce speed to the minimum level required to maintain steerage and safe working conditions. The Coast Guard has elected to establish a minimum shutdown zone size of 20 m, which is larger than NMFS' typical requirement of a minimum 10 m shutdown zone;

- Conduct training between construction supervisors and crews and the marine mammal monitoring team and relevant Coast Guard staff prior to the start of all DTH drilling, pile driving, cutting or power washing activity and when new personnel join the work, so that responsibilities, communication procedures, monitoring protocols, and operational procedures are clearly understood;

- DTH and pile driving activity must be halted upon observation of either a species for which incidental take is not authorized or a species for which incidental take has been authorized but the authorized number of takes has been met, entering or within the harassment zone;

- The Coast Guard will establish and implement a minimum shutdown zone of 20 m during all DTH, pile driving and removal activity, as well as the larger zones indicated in table 17. The purpose of a shutdown zone is generally to define an area within which shutdown of the activity would occur upon sighting of a marine mammal (or in anticipation of an animal entering the defined area). Shutdown zones typically vary based on the activity type and marine mammal hearing group. The Coast Guard has elected to establish a minimum shutdown zone size of 20 m, which is larger than NMFS' typical requirement of a minimum 10 m shutdown zone;

- Employ PSOs and establish monitoring locations as described in the application, any issued LOA and the Marine Mammal Monitoring Plan. The Coast

Guard must monitor the project area to the maximum extent possible based on the required number of PSOs, required monitoring locations, and environmental conditions. Anticipated observable zones within the designated monitoring zones shall be identified in the Marine Mammal Monitoring Plan, subject to approval by NMFS. For all DTH and pile driving at least one PSO must be used. The PSO will be stationed as close to the activity as possible;

- The placement of the PSOs during all DTH and pile driving activities will ensure that the entire shutdown zone is visible during pile installation. Should environmental conditions deteriorate such that marine mammals within the entire shutdown zone will not be visible (*e.g.*, fog, heavy rain), pile driving must be delayed until the PSO is confident marine mammals within the shutdown zone could be detected;
- Monitoring must take place from 30 minutes prior to initiation of DTH and pile driving activity through 30 minutes post-completion of DTH and pile driving activity. Pre-start clearance monitoring must be conducted during periods of visibility sufficient for the lead PSO to determine the shutdown zones clear of marine mammals. DTH and pile driving may commence following 30 minutes of observation when the determination is made;
- If DTH or pile driving is delayed or halted due to the presence of a marine mammal, the activity may not commence or resume until either the animal has voluntarily exited and been visually confirmed beyond the shutdown zone or 15 minutes have passed without re-detection of the animal;
- The Coast Guard must use soft start techniques prior to beginning impact pile driving. Soft start requires contractors to provide an initial set of three strikes at reduced energy, followed by a 30-second waiting period, then two subsequent reduced-energy strike sets. A soft start must be implemented at the start of each day's impact pile

driving and at any time following cessation of impact pile driving for a period of 30 minutes or longer;

- As described previously, the Coast Guard would adhere to in-water work windows designed for the protection of fishes and marine mammals under other permitting requirements;
- The Coast Guard has volunteered that in-water construction activities will occur only during civil daylight hours; and
- Pile driving activity must be halted upon observation of either a species for which incidental take is not authorized or a species for which incidental take has been authorized but the authorized number of takes has been met, entering or within the largest applicable harassment zone.

**Table 17 -- Shutdown Zones (m) for Each Pile Type and Method**

Method and Pile Type	Low Frequency Cetacean	Mid Frequency Cetacean	High Frequency Cetacean	Phocid	Otariid
Timber Vibratory	20	20	20	20	20
24-inch Steel Pipe Vibratory	20	20	20	20	20
Timber Impact	20	20	30	20	20
Composite Impact	20	20	20	20	20
24-inch Steel Pipe Impact	220	20	260	120	20
24-inch Concrete Impact	30	20	40	20	20
24-inch DTH	440	20	520	240	20

Based on our evaluation of the applicant's planned measures, as well as other measures considered by NMFS, NMFS has determined that the mitigation measures provide the means effecting the least practicable impact on the affected species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of such species or stock for subsistence uses.

### **Monitoring and Reporting**

In order to issue an LOA for an activity, Section 101(a)(5)(A) of the MMPA states that NMFS must set forth requirements pertaining to the monitoring and reporting of the authorized taking. The MMPA implementing regulations at 50 CFR 216.104(a)(13) indicate that requests for authorizations must include the suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species and of the level of taking or impacts on populations of marine mammals that are expected to be present in the action area. Effective reporting is critical both to compliance as well as ensuring that the most value is obtained from the required monitoring.

Monitoring and reporting requirements prescribed by NMFS should contribute to improved understanding of one or more of the following:

- Occurrence of marine mammal species or stocks in the area in which take is anticipated (*e.g.*, presence, abundance, distribution, density).
- Nature, scope, or context of likely marine mammal exposure to potential stressors/impacts (individual or cumulative, acute or chronic), through better understanding of: (1) action or environment (*e.g.*, source characterization, propagation, ambient noise); (2) affected species (*e.g.*, life history, dive patterns); (3) co-occurrence of marine mammal species with the action; or (4) biological or behavioral context of exposure (*e.g.*, age, calving, or feeding areas).
- Individual marine mammal responses (behavioral or physiological) to acoustic stressors (acute, chronic, or cumulative), other stressors, or cumulative impacts from multiple stressors.
- How anticipated responses to stressors impact either: (1) long-term fitness and survival of individual marine mammals; or (2) populations, species, or stocks.
- Effects on marine mammal habitat (*e.g.*, marine mammal prey species,

acoustic habitat, or important physical components of marine mammal habitat).

- Mitigation and monitoring effectiveness.

#### *Visual Monitoring*

- Monitoring must be conducted by qualified, NMFS-approved PSOs, in accordance with the following: PSOs must be independent (*i.e.*, not construction personnel) and have no other assigned tasks during monitoring periods. At least one PSO must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization. Other PSOs may substitute education (degree in biological science or related field), or training for experience. The Coast Guard shall submit PSO curriculum vitae (CVs) for approval by NMFS. PSOs must be approved by NMFS prior to beginning any activity subject to any LOA issued pursuant to this rule.

- PSOs must record all observations of marine mammals as described in any issued LOA and the NMFS-approved Marine Mammal Monitoring Plan, regardless of distance from the pile being driven. PSOs shall document any behavioral reactions in concert with distance from piles being driven or removed;

PSOs must have the following additional qualifications:

- Ability to conduct field observations and collect data according to assigned protocols;
- Experience or training in the field identification of marine mammals, including the identification of behaviors;
- Sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations;

- Writing skills sufficient to prepare a report of observations including but not limited to the number and species of marine mammals observed; dates and times when in-water construction activities were conducted; dates, times, and reason for implementation of mitigation (or why mitigation was not implemented when required); and marine mammal behavior; and
- Ability to communicate orally, by radio or in person, with project personnel to provide real-time information on marine mammals observed in the area as necessary;
- The Coast Guard must establish the following monitoring locations. For all pile driving activities, a minimum of one PSO must be assigned to the active pile driving location to monitor the shutdown zones and as much of the Level B harassment zones as possible. Possible monitoring locations are shown in Figures 6-1 through 6-41 of the application and summarized in table 18. The number of PSOs required at each facility is dependent upon the size of the Level B harassment area as well as the topography of the activity site and a PSO's ability to observe the estimated Level A harassment area for the particular activity. Where a team of three or more PSOs is required, a lead observer or monitoring coordinator must be designated. The lead observer must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.

**Table 18 -- Summary of Protected Species Observer (PSO) Coverage at Each Facility**

Facility	Maximum Number of PSOs
Kodiak	2
Sitka	5
Ketchikan	5
Valdez	3
Cordova	3
Juneau	3
Petersburg	3

### *Reporting*

A draft marine mammal monitoring report will be submitted to NMFS within 90 days after the completion of pile driving activities, or 60 days prior to a requested date of issuance of any future LOAs for projects at the same location, whichever comes first. The report will include an overall description of work completed, a narrative regarding marine mammal sightings, and associated PSO data sheets. Specifically, the report must include:

- Dates and times (begin and end) of all marine mammal monitoring.
- Construction activities occurring during each daily observation period, including the number and type of piles driven or removed and by what method (*i.e.*, impact or cutting) and the total equipment duration. When possible, the report should include the number of strikes for each pile (impact driving, DTH) and, for DTH, the duration of operation for both impulsive and non-impulsive components as well as the strike rate.
- PSO locations during marine mammal monitoring.
- Environmental conditions during monitoring periods (at beginning and end of PSO shift and whenever conditions change significantly), including Beaufort sea state and any other relevant weather conditions such as cloud cover, fog, sun glare, and overall visibility to the horizon, and estimated observable distance;
- Upon observation of a marine mammal, the following information: name of PSO who sighted the animal(s), and PSO location and activity at time of sighting; time of sighting; identification of the animal(s) (*e.g.*, genus/species, lowest possible taxonomic level, or unidentified), PSO confidence in identification, and the composition of the group if there is a mix of species; distance and bearing of each marine mammal observed



relative to the pile being driven for each sighting (if pile driving was occurring at time of sighting); estimated number of animals (min/max/best estimate); estimated number of animals by cohort (adults, juveniles, neonates, group composition, *etc.*); animal's closest point of approach and estimated time spent within the harassment zone; and description of any marine mammal behavioral observations (*e.g.*, observed behaviors such as feeding or traveling), including an assessment of behavioral responses thought to have resulted from the activity (*e.g.*, no response or changes in behavioral state such as ceasing feeding, changing direction, flushing, or breaching);

- Number of marine mammals detected within the harassment zones, by species; and
- Detailed information about any implementation of any mitigation triggered (*e.g.*, shutdowns and delays), a description of specific actions that ensued, and resulting changes in behavior of the animal(s), if any.

If no comments are received from NMFS within 30 days, the draft final report will constitute the final report. If comments are received, a final report addressing NMFS comments must be submitted within 30 days after receipt of comments.

#### *Reporting Injured or Dead Marine Mammals*

In the event that personnel involved in the construction activities discover an injured or dead marine mammal, the Coast Guard must immediately cease the specified activities and report the incident to the NMFS Office of Protected Resources (OPR) ([PR.ITP.MonitoringReports@noaa.gov](mailto:PR.ITP.MonitoringReports@noaa.gov)) and to the Alaska Regional Stranding Coordinator as soon as feasible. If the death or injury was likely caused by the specified activity, the Coast Guard must immediately cease the specified activities until NMFS is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of the LOA and

regulations. The Coast Guard must not resume their activities until notified by NMFS.

The report must include the following information:

- Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);
- Species identification (if known) or description of the animal(s) involved;
- Condition of the animal(s) (including carcass condition if the animal is dead);
- Observed behaviors of the animal(s), if alive;
- If available, photographs or video footage of the animal(s); and
- General circumstances under which the animal was discovered.

### **Negligible Impact Analysis and Determination**

NMFS has defined negligible impact as an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival (50 CFR 216.103). A negligible impact finding is based on the lack of likely adverse effects on annual rates of recruitment or survival (*i.e.*, population-level effects). An estimate of the number of takes alone is not enough information on which to base an impact determination. In addition to considering estimates of the number of marine mammals that might be “taken” through harassment, NMFS considers other factors, such as the likely nature of any responses (*e.g.*, intensity, duration), the context of any responses (*e.g.*, critical reproductive time or location, migration), as well as effects on habitat, and the likely effectiveness of the mitigation. We also assess the number, intensity, and context of estimated takes by evaluating this information relative to population status. Consistent with the 1989 preamble for NMFS’ implementing regulations (54 FR 40338, September 29, 1989), the impacts from other past and ongoing anthropogenic activities

are incorporated into this analysis via their impacts on the environmental baseline (*e.g.*, as reflected in the regulatory status of the species, population size and growth rate where known, ongoing sources of human-caused mortality, or ambient noise levels).

DTH and pile driving activities associated with the maintenance projects, as described previously, have the potential to disturb or displace marine mammals. Specifically, the specified activities may result in take, in the form of Level B harassment (behavioral disturbance) only for all species other than the harbor porpoise, harbor seal, and Dall's porpoise from underwater sounds generated from DTH and pile driving. Potential takes could occur if individual marine mammals are present in the ensonified zone when DTH or pile driving is happening.

No serious injury or mortality would be expected even in the absence of the mitigation measures. For all species other than the harbor seal, harbor porpoise and Dall's porpoise, no Level A harassment is anticipated due to the confined nature of the facilities, the ability to position PSOs at stations from which they can observe the entire shutdown zones, and the high visibility of the species expected to be present at each site. Additionally, much of the anticipated activity would involve vibratory driving or installation of small-diameter, non-steel piles, and include measures designed to minimize the possibility of injury. The potential for injury is small for mid- and low-frequency cetaceans and sea lions, and is expected to be essentially eliminated through implementation of the planned mitigation measures – soft start (for impact driving), and shutdown zones.

DTH and impact driving, as compared with vibratory driving, have source characteristics (short, sharp pulses with higher peak levels and much sharper rise time to reach those peaks) that are potentially injurious or more likely to produce severe behavioral reactions. Given sufficient notice through use of soft start, marine mammals are expected to move away from a sound source that is annoying prior to it becoming

potentially injurious or resulting in more severe behavioral reactions. Environmental conditions in these waters are expected to generally be good, with calm sea states, and we expect conditions would allow a high marine mammal detection capability, enabling a high rate of success in implementation of shutdowns to avoid injury.

As described previously, there are multiple species that should be considered rare in the project areas and for which we propose to authorize only nominal and precautionary take. Therefore, we do not expect meaningful impacts to these species (*i.e.*, gray whale, minke whale, transient and resident killer whales, and California sea lions) and find that the total marine mammal take from each of the specified activities will have a negligible impact on these marine mammal species.

For remaining species, we discuss the likely effects of the specified activities in greater detail here. Effects on individuals that are taken by Level B harassment, on the basis of reports in the literature as well as monitoring from other similar activities, will likely be limited to reactions such as increased swimming speeds, increased surfacing time, or decreased foraging (if such activity were occurring) (*e.g.*, Thorson and Reyff, 2006; U.S. Navy, 2012; Lerma, 2014). Most likely, individuals will simply move away from the sound source and be temporarily displaced from the areas of pile driving, although even this reaction has been observed primarily only in association with impact pile driving. The pile driving activities analyzed here are similar to, or less impactful than, numerous other construction activities conducted in Alaska, San Francisco Bay and in the Puget Sound region, which have taken place with no known long-term adverse consequences from behavioral harassment.

The U.S. Navy has conducted multi-year activities in various locations such as San Diego Bay and Puget Sound, potentially affecting marine mammals, and typically involving greater levels of activity than what is contemplated here. Reporting from these activities has similarly documented no apparently consequential behavioral reactions or

long-term effects on marine mammal populations (Lerma, 2014; U.S. Navy, 2016a and b).

Repeated exposures of individuals to relatively low levels of sound outside of preferred habitat areas are unlikely to significantly disrupt critical behaviors. Thus, even repeated Level B harassment of some small subset of the overall stock is unlikely to result in any significant realized decrease in viability for the affected individuals, and thus would not result in any adverse impact to the stock as a whole. Level B harassment will be reduced to the level of least practicable adverse impact through use of mitigation measures described herein and, if sound produced by project activities is sufficiently disturbing, animals are likely to simply avoid the area while the activity is occurring. While vibratory driving or DTH associated with some project components may produce sound at distances of many kilometers from the pile driving site, thus intruding on higher-quality habitat, the project sites themselves and the majority of sound fields produced by the specified activities are within industrialized areas. Therefore, we expect that animals annoyed by project sound would simply avoid the area and use more-preferred habitats.

In addition to the expected effects resulting from authorized Level B harassment, we anticipate that harbor seals, harbor porpoises, and Dall's porpoises may sustain some limited Level A harassment in the form of auditory injury at four of the facilities, assuming they remain within a given distance of the pile driving activity for the full number of pile strikes or DTH strikes. Considering the short duration to impact drive or vibrate each pile and breaks between pile installations (to reset equipment and move pile into place), this means an animal would have to remain within the area estimated to be ensonified above the Level A harassment threshold for multiple hours. This is highly unlikely given marine mammal movement throughout the area. Harbor seals and porpoises in these locations that do experience PTS would likely only receive slight PTS, *i.e.*, minor degradation of hearing capabilities within regions of hearing that align most

completely with the energy produced by DTH or pile driving, *i.e.*, the low-frequency region below 2 kHz, not severe hearing impairment or impairment in the regions of greatest hearing sensitivity. If hearing impairment occurs, it is most likely that the affected animal would lose a few decibels in its hearing sensitivity, which in most cases is not likely to meaningfully affect its ability to forage and communicate with conspecifics. As described above, we expect that marine mammals would be likely to move away from a sound source that represents an aversive stimulus, especially at levels that would be expected to result in PTS, given sufficient notice through use of soft start. Shutdown zones for the porpoises are only slightly smaller than the extent of the Level A harassment zones, further minimizing the chances for PTS or more severe effects.

In addition, although affected humpback whales and Steller sea lions may be from distinct population segments (DPSs) that are listed under the ESA, it is unlikely that minor noise impacts in a small, localized area of sub-optimal habitat would have any effect on the stocks' ability to recover. In combination, we believe that these factors, as well as the available body of evidence from other similar activities, demonstrate that the potential effects of the specified activities will have only minor, short-term effects on individuals. The specified activities are not expected to impact rates of recruitment or survival and will therefore not result in population-level impacts.

In summary and as described above, the following factors primarily support our determination that the impacts resulting from this activity are not expected to adversely affect the species or stock through effects on annual rates of recruitment or survival:

- No mortality is anticipated or authorized.
- Use of soft start (for impact driving) is expected to minimize Level A harassment.
- No important habitat areas have been identified within the project area.

- For all species, the project locations are a very small and generally peripheral part of their range.
- Authorized Level A harassment would be very small amounts and of low degree.
- Monitoring reports from similar work in many of the locations in Alaska have documented little to no effect on individuals of the same species impacted by the specified activities.

Based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat, and taking into consideration the implementation of the monitoring and mitigation measures, NMFS finds that the total marine mammal take from the planned activities will have a negligible impact on the affected marine mammal species or stocks.

### **Small Numbers**

As noted above, only small numbers of incidental take may be authorized under Section 101(a)(5)(A) of the MMPA for specified activities. The MMPA does not define small numbers and so, in practice, where estimated numbers are available, NMFS compares the number of individuals taken to the most appropriate estimation of abundance of the relevant species or stock in our determination of whether an authorization is limited to small numbers of marine mammals. When the predicted number of individuals to be taken is fewer than one-third of the species or stock abundance, the take is considered to be of small numbers. Additionally, other qualitative factors may be considered in the analysis, such as the temporal or spatial scale of the activities.

The amount of take NMFS is authorizing is below one-third of the estimated stock abundance of all species and stocks (take of individuals is less than 14 percent of

the abundance of the affected stocks for the year of this rulemaking with the maximum amount of activity; see table 19). This is likely a conservative estimate because it assumes all takes are of different individual animals, which is likely not the case. Some individuals may return multiple times in a day, but PSOs would count them as separate takes if they cannot be individually identified.

For fin whale, minke whale, Dall's porpoise, and Southeast Alaska harbor porpoise, no valid abundance estimate for the entire stock is available. There is no stock-wide abundance estimate for Northeast Pacific fin whales. However, Muto *et al.* (2021) estimate the minimum stock size for the areas surveyed is 2,554. Therefore, the 23 maximum annual authorized takes of this stock represents small numbers of this stock. There is no stock-wide abundance estimate for the Alaska stock of minke whales. However, Muto *et al.* (2021) show over 2,000 animals for areas surveyed recently. Therefore, the six maximum annual authorized takes of this stock represents small numbers of this stock. The Alaska stock of Dall's porpoise has no official NMFS abundance estimate for this area, as the most recent estimate is greater than 8 years old. Nevertheless, the most recent estimate was 83,400 animals and it is unlikely this number has drastically declined. Therefore, the 245 maximum annual authorized takes of this stock represents small numbers of this stock. There is no stock-wide abundance estimate for the Southeast Alaska stock of harbor porpoises. However, Muto *et al.* (2021) estimate the minimum stock size for the areas surveyed is 1,057. Therefore, the 92 maximum annual authorized takes of this stock represents small numbers of this stock. Therefore, we find that small numbers of marine mammals will be taken relative to the population size of all stocks.

Based on the analysis contained herein of the planned activity (including the mitigation and monitoring measures) and the anticipated take of marine mammals, NMFS



finds that small numbers of marine mammals will be taken relative to the population sizes of the affected species or stocks.

### **Unmitigable Adverse Impact Analysis and Determination**

In order to issue regulations and LOAs, NMFS must find that the specified activity will not have an “unmitigable adverse impact” on the subsistence uses of the affected marine mammal species or stocks by Alaskan Natives. NMFS has defined “unmitigable adverse impact” in 50 CFR 216.103 as an impact resulting from the specified activity: (1) that is likely to reduce the availability of the species to a level insufficient for a harvest to meet subsistence needs by: (i) causing the marine mammals to abandon or avoid hunting areas; (ii) directly displacing subsistence users; or (iii) placing physical barriers between the marine mammals and the subsistence hunters; and (2) that cannot be sufficiently mitigated by other measures to increase the availability of marine mammals to allow subsistence needs to be met.

As discussed above in the *Effects of Specified Activities on Subsistence Uses of Marine Mammals* section, subsistence harvest of harbor seals and other marine mammals is rare in the project areas and local subsistence users have not expressed concern about this project. All project activities will take place within industrialized areas where subsistence activities do not generally occur. The project also will not have an adverse impact on the availability of marine mammals for subsistence use at locations farther away, where these construction activities are not expected to take place. Some minor, short-term harassment of the harbor seals could occur, but any effects on subsistence harvest activities in the region will be minimal, and will not have an adverse impact.

Based on the effects and locations of the specified activity, and the mitigation and monitoring measures, NMFS has determined that there will not be an unmitigable adverse impact on subsistence uses from the Coast Guard’s planned activities.

### **Adaptive Management**

The regulations governing the take of marine mammals incidental to Coast Guard maintenance construction activities would contain an adaptive management component.

The reporting requirements associated with this final rule are designed to provide NMFS with monitoring data from the previous year to allow consideration of whether any changes are appropriate. The use of adaptive management allows NMFS to consider new information from different sources to determine (with input from the Coast Guard regarding practicability) on an annual basis if mitigation or monitoring measures should be modified (including additions or deletions). Mitigation measures could be modified if new data suggests that such modifications would have a reasonable likelihood of reducing adverse effects to marine mammals and if the measures are practicable.

The following are some of the possible sources of applicable data to be considered through the adaptive management process: (1) results from monitoring reports, as required by MMPA authorizations; (2) results from general marine mammal and sound research; and (3) any information which reveals that marine mammals may have been taken in a manner, extent, or number not authorized by these regulations or subsequent LOAs.

### **Endangered Species Act**

Section 7(a)(2) of the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*) requires that each Federal agency insure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat. To ensure ESA compliance for the issuance of regulations and LOAs, NMFS consults internally, in this case with the Alaska Regional Office, whenever we propose to authorize take for endangered or threatened species.

NMFS is authorizing take of Western DPS Steller sea lions (*Eumetopias jubatus*), fin whales (*Balenoptera physalus*), and Mexico DPS of humpback whales (*Megaptera*

*novaeangliae*), which are listed under the ESA. The NMFS Alaska Regional Office issued a Biological Opinion under Section 7 of the ESA (<https://www.fisheries.noaa.gov/action/incidental-take-authorization-us-coast-guards-alaska-facility-maintenance-and-repair>) on the issuance of regulations and an LOA to the Coast Guard under section 101(a)(5)(D) of the MMPA by the NMFS Office of Protected Resources. The Biological Opinion concluded that the proposed action is not likely to jeopardize the continued existence of Western DPS Steller sea lions, fin whales, or humpback whales from either the Mexico or Western North Pacific DPSs.

### **National Environmental Policy Act**

To comply with the National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. 4321 *et seq.*) and NOAA Administrative Order (NAO) 216-6A, NMFS must evaluate our proposed action (*i.e.*, the promulgation of regulations and subsequent issuance of incidental take authorization) and alternatives with respect to potential impacts on the human environment.

This action is consistent with categories of activities identified in Categorical Exclusion B4 of the Companion Manual for NAO 216-6A, which do not individually or cumulatively have the potential for significant impacts on the quality of the human environment and for which we have not identified any extraordinary circumstances that would preclude this categorical exclusion. Accordingly, NMFS has determined that this action qualifies to be categorically excluded from further NEPA review.

### **Classification**

Pursuant to the procedures established to implement Executive Order 12866, the Office of Management and Budget has determined that this rule is not significant.

Pursuant to section 605(b) of the Regulatory Flexibility Act (RFA), the Chief Counsel for Regulation of the Department of Commerce has certified to the Chief Counsel for Advocacy of the Small Business Administration at the proposed rule stage

that this action will not have a significant economic impact on a substantial number of small entities. The Coast Guard is the sole entity that would be subject to the requirements in these proposed regulations, and the Coast Guard is not a small governmental jurisdiction, small organization, or small business, as defined by the RFA. No comments were received regarding this certification, and the factual basis for the certification has not changed. As a result, a regulatory flexibility analysis was not required and none was prepared.

This final rule does not contain a collection-of-information requirement subject to the provisions of the Paperwork Reduction Act because the applicant is a Federal agency.

**List of Subjects in 50 CFR Part 217**

Exports, Fish, Imports, Indians, Labeling, Marine mammals, Penalties, Reporting and recordkeeping requirements, Seafood, Transportation.

Dated: December 14, 2023.

**Samuel D. Rauch III,**

*Deputy Assistant Administrator for Regulatory Programs,*

*National Marine Fisheries Service.*

For reasons set forth in the preamble, NMFS amends 50 CFR part 217 as follows:

**PART 217 – REGULATIONS GOVERNING THE TAKING OF MARINE  
MAMMALS INCIDENTAL TO SPECIFIED ACTIVITIES**

1. The authority citation for part 217 continues to read as follows:

**Authority:** 16 U.S.C. 1361 *et seq.*

2. Add subpart T to read as follows:

**Subpart T – Taking Marine Mammals Incidental to U.S. Coast Guard Alaska**

**Facility Maintenance and Repair Activities**

Sec.

217.190 Specified activity and specified geographical region.

217.191 Effective dates.

217.192 Permissible methods of taking.

217.193 Prohibitions.

217.194 Mitigation requirements.

217.195 Requirements for monitoring and reporting.

217.196 Letters of Authorization.

217.197 Renewals and modifications of Letters of Authorization.

217.198 - 217.199 [Reserved]

**Subpart T – Taking Marine Mammals Incidental to U.S. Coast Guard Alaska**

**Facility Maintenance and Repair Activities**

**§ 217.190 Specified activity and specified geographical region.**

(a) Regulations in this subpart apply only to incidental taking of marine mammals by the U.S. Coast Guard (Coast Guard) and those persons it authorizes or funds to conduct activities on its behalf in the areas outlined in paragraph (b) of this section and that occurs incidental to maintenance construction activities.

(b) The taking of marine mammals by the Coast Guard may be authorized in a Letter of Authorization (LOA) only if it occurs within Gulf of Alaska waters in the vicinity of one of the following eight Coast Guard facilities: Kodiak, Sitka, Ketchikan, Valdez, Cordova, Juneau, Petersburg, and Seward.

**§ 217.191 Effective dates.**

Regulations in this subpart are effective from March 1, 2024, through February

28, 2029.

**§ 217.192 Permissible methods of taking.**

Under LOAs issued pursuant to §§ 216.106 of this chapter and 217.196, the Holder of the LOA (hereinafter “Coast Guard”) may incidentally, but not intentionally, take marine mammals within the areas described in § 217.190(b) by Level A or Level B harassment associated with maintenance construction activities, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA.

**§ 217.193 Prohibitions.**

Except for takings described in § 217.192 and authorized by a LOA issued under §§ 216.106 of this chapter and 217.196, it shall be unlawful for any person to do any of the following in connection with the activities described in § 217.190:

- (a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under §§ 216.106 of this chapter and 217.196;
- (b) Take any marine mammal not specified in such LOAs;
- (c) Take any marine mammal specified in such LOAs in any manner other than as authorized;
- (d) Take a marine mammal specified in such LOAs after NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal; or
- (e) Take a marine mammal specified in such LOAs after NMFS determines such taking results in an unmitigable adverse impact on the species or stock of such marine mammal for taking for subsistence uses.

**§ 217.194 Mitigation requirements.**

When conducting the activities identified in § 217.190(a), the mitigation measures contained in this subpart and any LOA issued under §§ 216.106 of this chapter and

217.196 must be implemented. These mitigation measures shall include but are not limited to:

(a) General conditions:

(1) A copy of any issued LOA must be in the possession of the Coast Guard, supervisory construction personnel, lead protected species observers, and any other relevant designees of the Coast Guard operating under the authority of this LOA at all times that activities subject to this LOA are being conducted.

(2) The Coast Guard shall conduct training between construction supervisors and crews and the marine mammal monitoring team and relevant Coast Guard staff prior to the start of all down-the-hole (DTH), pile driving, cutting or power washing activity and when new personnel join the work, so that responsibilities, communication procedures, monitoring protocols, and operational procedures are clearly understood.

(3) The Coast Guard shall avoid direct physical interaction with marine mammals during construction activity. If a marine mammal comes within 20 m of an activity regulated under this subpart, operations must cease and vessels must reduce speed to the minimum level required to maintain steerage and safe working conditions.

(b) Shutdown zones:

(1) For all DTH, pile driving, cutting or power washing activity, the Coast Guard shall implement a minimum shutdown zone of a 20-m radius around the pile or DTH hole. If a marine mammal comes within or approaches the shutdown zone, such operations shall cease.

(2) For all DTH and pile driving activity, the Coast Guard shall implement shutdown zones with radial distances as identified in any LOA issued under §§ 216.106 of this chapter and 217.196. If a marine mammal comes within or approaches the shutdown zone, such operations shall cease.

(3) For all DTH and pile driving activity, the Coast Guard shall designate

monitoring zones with radial distances as identified in any LOA issued under §§ 216.106 of this chapter and 217.196. Anticipated observable zones within the designated monitoring zones shall be identified in the Marine Mammal Monitoring Plan, subject to approval by NMFS.

(c) Shutdown protocols:

(1) The Coast Guard shall deploy Protected Species Observers (PSOs) as indicated in the Marine Mammal Monitoring Plan, which shall be subject to approval by NMFS, and as described in § 217.195.

(2) For all DTH and pile driving activities, a minimum of one PSO shall be stationed at the active pile driving rig or activity site or in reasonable proximity in order to monitor the entire shutdown zone.

(3) Monitoring must take place from 30 minutes prior to initiation of DTH and pile driving activity through 30 minutes post-completion of DTH and pile driving activity. Pre-start clearance monitoring must be conducted during periods of visibility sufficient for the lead PSO to determine the shutdown zones are clear of marine mammals. DTH and pile driving activity may commence following 30 minutes of observation when the determination is made.

(4) If DTH and pile driving activity is delayed or halted due to the presence of a marine mammal, the activity may not commence or resume until either the animal has voluntarily exited and been visually confirmed beyond the shutdown zone or 15 minutes have passed without re-detection of the animal.

(5) Should environmental conditions deteriorate such that marine mammals within the entire shutdown zone would not be visible (*e.g.*, fog, heavy rain, night), the Coast Guard must delay in-water construction activities until observers are confident marine mammals within the shutdown zone could be detected. (6) Monitoring shall be conducted by trained PSOs, who shall have no other assigned tasks during monitoring



periods. Trained PSOs shall be placed at the best vantage point(s) practicable to monitor for marine mammals and implement shutdown or delay procedures when applicable through communication with the equipment operator. The Coast Guard shall adhere to the PSO qualifications in § 217.195.

(d) The Coast Guard must use soft start techniques for impact pile driving. Soft start for impact drivers requires contractors to provide an initial set of three strikes at reduced energy, followed by a 30-second waiting period, then two subsequent reduced energy three-strike sets. Soft start shall be implemented at the start of each day's impact pile driving and at any time following cessation of impact pile driving for a period of 30 minutes or longer.

**§ 217.195 Requirements for monitoring and reporting.**

(a) The Coast Guard must submit a Marine Mammal Monitoring Plan to NMFS for approval in advance of construction. Marine mammal monitoring must be conducted in accordance with the conditions in this section and the Marine Mammal Monitoring Plan.

(b) Monitoring must be conducted by qualified, NMFS-approved PSOs, in accordance with the following:

(1) PSOs must be independent of the activity contractor (*i.e.* not employed by the construction contractor), and have no other assigned tasks during monitoring periods.

(2) At least one PSO must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.

(3) Other PSOs may substitute education (degree in biological science or related field) or training for prior experience.

(4) Where a team of three or more PSOs are required, one observer shall be designated as lead observer or monitoring coordinator. The lead observer must have prior experience performing the duties of a PSO during construction activity pursuant to a

NMFS-issued incidental take authorization.

(5) The Coast Guard must submit PSO curriculum vitae (CVs) for approval by NMFS. PSOs must be approved by NMFS prior to beginning any activity subject to this regulation.

(c) PSOs must record all observations of marine mammals as described in the Marine Mammal Monitoring Plan, regardless of distance from the pile being driven. PSOs shall document any behavioral reactions in concert with distance from piles being driven or removed.

(d) The Coast Guard shall deploy additional PSOs to monitor harassment zones according to the minimum requirements defined in Marine Mammal Monitoring Plan, subject to approval by NMFS. These observers shall collect sighting data and behavioral responses to pile driving for marine mammal species observed in the region of activity during the period of activity, and shall communicate with the shutdown zone observer(s) as appropriate with regard to the presence of marine mammals. All observers shall be trained in identification and reporting of marine mammal behaviors.

(e) Reporting:

(1) Annual reporting:

(i) Coast Guard shall submit a draft monitoring report to NMFS within 90 work days of the completion of required monitoring for each portion of the project as well as a comprehensive summary report at the end of the project. Coast Guard shall provide a final report within 30 days following resolution of comments on the draft report. If no work requiring monitoring is conducted within a calendar year, Coast Guard shall provide a statement to that effect in lieu of a draft report.

(ii) These reports shall contain, at minimum, the following:

(A) Dates and times (begin and end) of all marine mammal monitoring;

(B) Construction activities occurring during each daily observation period,

including the number and type of piles driven or removed and by what method (*i.e.*, impact or vibratory) and the total equipment duration for vibratory or DTH for each pile. When possible, the number of strikes for each pile/hole (impact driving, DTH); and, for DTH, the duration of operation for both impulsive and non-impulsive components as well as the strike rate must be included;

(C) PSO locations during marine mammal monitoring;

(D) Environmental conditions during monitoring periods (at beginning and end of PSO shift and whenever conditions change significantly), including Beaufort sea state and any other relevant weather conditions including cloud cover, fog, sun glare, and overall visibility to the horizon, and estimated observable distance;

(E) Upon observation of a marine mammal, the following information: Name of PSO who sighted the animal(s) and PSO location and activity at time of sighting; Time of sighting; Identification of the animal(s) (*e.g.*, genus and species, lowest possible taxonomic level, or unidentified), PSO confidence in identification, and the composition of the group if there is a mix of species; Distance and bearing of each marine mammal observed relative to the pile being driven for each sighting (if pile driving was occurring at time of sighting); Estimated number of animals (min, max, and best estimate); Estimated number of animals by cohort (adults, juveniles, neonates, group composition, *etc.*); Animal's closest point of approach and estimated time spent within the harassment zone; and Description of any marine mammal behavioral observations (*e.g.*, observed behaviors such as feeding or traveling), including an assessment of behavioral responses thought to have resulted from the activity (*e.g.*, no response or changes in behavioral state such as ceasing feeding, changing direction, flushing, or breaching);

(F) Number of marine mammals detected within the harassment zones, by species;

(G) Detailed information about any implementation of any mitigation triggered

(e.g., shutdowns and delays), a description of specific actions that ensued, and resulting changes in behavior of the animal(s), if any.

(2) Coast Guard shall submit a comprehensive summary report to NMFS not later than 90 days following the conclusion of marine mammal monitoring efforts described in this subpart. All PSO datasheets and/or raw sighting data must be submitted with the draft reports.

(3) All draft and final monitoring reports must be submitted to *PR.ITP.MonitoringReports@noaa.gov* and *ITP.Hotchkin@noaa.gov*.

(f) Reporting of injured or dead marine mammals:

(1) In the event that personnel involved in the construction activities discover an injured or dead marine mammal, the Coast Guard must immediately cease the specified activities and report the incident to the Office of Protected Resources (*PR.ITP.MonitoringReports@noaa.gov* and *ITP.Hotchkin@noaa.gov*), NMFS and to Alaska Regional Stranding Coordinator as soon as feasible. If the death or injury was likely caused by the specified activity, the Coast Guard must immediately cease the specified activities until NMFS is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of the regulations under this subpart and LOAs. The Coast Guard must not resume their activities until notified by NMFS. The report must include the following information:

(i) Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);

(ii) Species identification (if known) or description of the animal(s) involved;

(iii) Condition of the animal(s) (including carcass condition if the animal is dead);

(iv) Observed behaviors of the animal(s), if alive;

(v) If available, photographs or video footage of the animal(s); and

(vi) General circumstances under which the animal was discovered.

(2) [Reserved]

**§ 217.196 Letters of Authorization.**

(a) To incidentally take marine mammals pursuant to the regulations under this subpart, the Coast Guard must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of the regulations under this subpart.

(c) If an LOA expires prior to the expiration date of the regulations under this subpart, the Coast Guard may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, the Coast Guard must apply for and obtain a modification of the LOA as described in § 217.197.

(e) The LOA shall set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA shall be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under the regulations of this subpart.

(g) Notice of issuance or denial of an LOA shall be published in the **Federal Register** within 30 days of a determination.

**§ 217.197 Renewals and modifications of Letters of Authorization.**

(a) An LOA issued under §§ 216.106 of this chapter and 217.196 for the activity identified in § 217.190(a) shall be renewed or modified upon request by the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for the regulations under this subpart (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section), and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA under the regulations of this subpart were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section) that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of proposed LOA in the **Federal Register**, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 216.106 of this chapter and 217.196 for the activity identified in § 217.190(a) may be modified by NMFS under the following circumstances:

(1) Adaptive Management – NMFS may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with the Coast Guard regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA:

(A) Results from the Coast Guard's monitoring from the previous year(s).

(B) Results from other marine mammal and/or sound research or studies.

(C) Any information that reveals marine mammals may have been taken in a manner, extent, or number not authorized by the regulations under this subpart or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of proposed LOA in the **Federal Register** and solicit public comment.

(2) Emergencies – If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in LOAs issued pursuant to §§ 216.106 of this chapter and 217.196, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the **Federal Register** within 30 days of the action.

**§§ 217.198 - 217.199 [Reserved]**

[FR Doc. 2023-27843 Filed: 12/19/2023 8:45 am; Publication Date: 12/20/2023]